

FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

(please fill in the highlighted areas)

I. APPLICANT INFORMATION

A. Applicant Name: Madison Conservation District

B. Mailing Address: PO Box 606

C. City: Ennis State: MT Zip: 59729

Telephone: 406-682-3181 E-mail: sunni@madisoncd.org

D. Contact Person: Sunni Heikes-Knapton

Address if different from Applicant: Same as above

City: State: Zip:

Telephone: E-mail:

E. Landowner and/or Lessee Name (if other than Applicant): Pat Goggins

Mailing Address: 22 Goggins Drive

City: Ennis State: MT Zip: 59729

Telephone: 406-682-4122 E-mail: thefeedman@yahoo.com

II. PROJECT INFORMATION*

A. Project Name: Moore's Creek Riparian Grazing and Water Quality Enhancement Project

River, stream, or lake: Moore's Creek- Tributary to the Madison River

Location: Township: 5S Range: 1W Section: 33

Latitude: 45.361311 Longitude: 111.729173 *within project (decimal degrees)*

County: Madison

B. Purpose of Project:

The purpose of the Moore's Creek Riparian Grazing and Water Quality Enhancement Project, which is on private property (the Goggins Ranch) immediately north of downtown Ennis, is to construct fencing and watering facilities to address the health of Moore's Creek water quality, to improve the health & vigor of the riparian area and stream channel, and to enhance livestock operations through increased management efficiency. The ranch is a working cattle operation, run by the Goggins family since the 1950s.

C. Brief Project Description:

This project is designed to install riparian fencing, hardened crossings, water gaps, and a well and tanks on the pastures and corrals along 3200 feet of Moore's Creek. Permanent 2 or 3 wire electric fence will be installed along 3200 feet of stream channel to create a 20-foot buffer either side of the stream. Top height of the wire will not exceed 42 inches above the ground, and the bottom wire will be at least 18 inches above the ground. A well and pipeline will be installed to provide fresh water to 2 rubber tire tanks, which will provide a water source for the existing fenced pastures east of the homestead. There will be 2 water gaps to allow access for livestock to water from the stream in areas where livestock are rotated through. A single hardened crossing will be constructed near the existing corrals to prevent sediment from entering the stream during crossings.

Natural recruitment of willows within the fenced stream corridor is anticipated after implementation of changes to grazing management, however, project managers plan on working with the Ennis High School Science Club to establish supplemental plantings of locally sourced willows.

The area will allow for better utilization by the livestock through a rest-rotation grazing program as recommended by MCD/NRCS staff and managed by the ranch. The area will be monitored closely for response in order to demonstrate effectiveness and project success. Moore's Creek is listed on the 303d as impaired for E. Coli and arsenic. The location of the ranch is immediately downstream from the urban area of the Town of Ennis.

D. Length of stream or size of lake that will be treated: 3200 feet

E. Project Budget:

Grant Request (Dollars): \$ 10,478.40

Contribution by Applicant (Dollars): \$ In-kind \$ 300.00

(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): \$ 26,877.28 In-kind \$ 2,409.53

(attach verification - See page 2 budget template)

Total Project Cost: \$ 40,065.21

F. Attach itemized (line item) budget – see template

G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

There is no fisheries data on this section of Moore's Creek, which follows a unique path from the south end of the Tobacco Root Mountains through the Town of Ennis, eventually flowing into the Fletcher Channel of the Madison River. It is assumed that the population includes rainbow, brown and/or brook trout, but it is unknown if fish from the Madison River use this area at any time through the year. Along its course the stream ranges through a variety of land uses which have historically had a significant impact on the water quality of the stream. Efforts to improve the fisheries habitat downstream from this project area have been completed by the Valley Garden Ranch. Their efforts sought to improve Moore's Creek habitat for the trout population in Fletcher's Channel of the Madison River. This proposed project compliments those downstream efforts, and creates better habitat and population potential for both resident and migratory species.

B. How will the project protect or enhance wild fish habitat?:

By limiting the grazing stress on the stream, project managers anticipate improving in-stream habitat and promoting the growth of a diverse riparian plant community through passive restoration techniques. The installation of fencing will reduce the impact of grazing to the bed and banks of Moore's Creek, allowing for recovery of the important riparian community that provide shade and habitat structure for instream use. Off channel water tanks, water gaps and hardened crossings will provide reliable access to water for livestock, while reducing hoof damage, bank slumping and sediment contributions to the stream, improving riparian and stream channel habitat. Another important benefit of the project is the high visibility of the area from U.S. Highway 287, and the short and convenient distance from the school for educational lessons.

C. Will the project improve fish populations and/or fishing? To what extent?:

The goal of the project is to improve the health of the stream through a new grazing management plan and establishment of riparian plant species. Through the installation of the project infrastructure and new grazing management along the stream, the stream will be provided a rest period to improve the vegetation along the stream, and reduce the impacts seen by current use. With time, instream habitat conditions will improve. The project coordinators anticipate that the completed work will provide an opportunity for resident fish populations to prosper, through established cover, improved habitat, and sediment reduction. A component of the project includes the collection of fisheries data, which will serve to indicate pre-project conditions, and allow for post project monitoring to quantify effectiveness of the work. Moore's Creek does not suffer from dewatering at any time of year, but water quality data collected on this stream does show a significant impact from surrounding land uses.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

The Madison River is one of the most heavily fished rivers in the state, supporting healthy populations of wild fish species. FWP data documents that several tributaries of the upper Madison River are used by these populations of rainbow and brown trout for spawning, including Jack Creek, which enters the Madison River from the east about 1 mile south of the Moore's Creek confluence with the river. This project provides an opportunity for the Madison River and Ennis Reservoir trout populations to access quality habitat, thereby potentially creating another important tributary for mainstem populations to utilize.

E. If the project requires maintenance, what is your time commitment to this project?:

The landowner is committed to limiting grazing access immediately following infrastructure installation. Any future grazing within the fenced riparian area would be undertaken after the stream has exhibited significant improvements as documented through photo point monitoring. Future grazing would be limited in duration and to the fall season, and follow a "take half, leave half" grazing approach for forage utilization. These efforts allow the landowner to still make use of the existing forage, while allowing the stream the necessary conditions for recovery.

- F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

It is suspected that the habitat degradation in the area is from recent and historic on site land use practices. The ranch has been progressive in reducing their impacts to the stream throughout the history of the operation, having adapted from the time period where all corrals and sorting facilities were placed on the stream. While the current land use practices are a significant improvement from these previous conditions, the project seeks to place a greater emphasis on the health of the stream through adapted management and limited grazing access. Monitoring of the site will be initiated immediately after construction completion, and again at the conclusion of the growing season. Site photos and a monitoring/completion report would be submitted to supporting entities. Because Moore's Creek is in the pre-TMDL planning phase, future water quality monitoring is contingent on the pending impairment determination. If the impairment status is confirmed, this project will be a benefit to the completion of the TMDL for this stream.

- G. What public benefits will be realized from this project?:

Immediate benefits to the public include additional higher quality habitat for resident and migratory populations of fish in the immediate and downstream areas. Additional benefits include an excellent example of a grazing project located in a highly visible location, and a convenient site for lessons and service project focused on the local Elementary and High School classes and clubs. Volunteers with the Madison Stream Team will be afforded the opportunity to put their monitoring skills to work in documenting the response to the restoration.

- H. Will the project interfere with water or property rights of adjacent landowners? (explain):

The project will not interfere with property or water rights of adjacent landowners. The project proposes to encourage the use of water tanks and limit the current water access by livestock in the stream, therefore creating a better opportunity for maintaining stream flows in the channel.

- I. Will the project result in the development of commercial recreational use on the site?: (explain):

Because the property is currently operated as a working cattle ranch, there are no plans to develop commercial recreational use for the area. However, immediately upstream from the property lies the city of Ennis, where the stream channel of Moore's Creek flows directly through the center of town and is accessed by a large number of people.

- J. Is this project associated with the reclamation of past mining activity?:

This project is not associated with past mining activity.

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:



Date: 11/29/2014

Sponsor (if applicable):

***Highlighted boxes will automatically expand.**

**Mail To: Montana Fish, Wildlife & Parks
Habitat Protection Bureau
PO Box 200701
Helena, MT 59620-0701**

**E-mail To: Michelle McGree
mmcgree@mt.gov**

**Incomplete or late applications will be returned to applicant.
Applications may be rejected if this form is modified.**

*****Applications may be submitted at anytime, but must be received by the Future Fisheries Program office in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****

Supporting Information

WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION *	COST/UNIT	TOTAL COST	CONTRIBUTIONS				
					FUTURE FISHERIES REQUEST	IN-KIND SERVICES	IN-KIND CASH	TOTAL	
Personnel									
Survey			\$	-				\$	-
Design	20	hours	\$20.00	\$ 400.00		400.00		\$	400.00
Engineering			\$	-				\$	-
Permitting	15	hours	\$20.00	\$ 300.00		300.00		\$	300.00
Oversight	80	hours	\$20.00	\$ 1,600.00			1,600.00	\$	1,600.00
Labor	40	hours	\$15.00	\$ 600.00		600.00		\$	600.00
			Sub-Total	\$ 2,900.00	\$ -	\$ 1,300.00	\$ 1,600.00	\$	2,900.00
Travel									
Mileage			\$	-				\$	-
Per diem			\$	-				\$	-
			Sub-Total	\$ -	\$ -	\$ -	\$ -	\$	-
Construction Materials									
North Project Area									
Stockwater pipeline	1370	feet	\$4.27	\$ 5,849.90			5,849.90	\$	5,849.90
Stockwater Tank	2400	gallons	\$2.79	\$ 6,696.00			6,696.00	\$	6,696.00
Rails for tanks	20	rails	\$14.95	\$ 299.00		44.85	254.15	\$	299.00
Perm. Electric Fence	2600	Feet	\$1.77	\$ 4,602.00	4,256.85	345.15		\$	4,602.00
Well	100	Feet	\$51.99	\$ 5,199.00			5,199.00	\$	5,199.00
Pumping Plant	0.5	HP	\$1,938.81	\$ 969.41			969.41	\$	969.41
Hardened Crossings	500	Square Feet	\$4.14	\$ 2,070.00			2,070.00	\$	2,070.00
Water Gap	3	Panels	\$120.00	\$ 360.00		360.00		\$	360.00
Set Posts for Bridge and water gaps	7	Posts	\$25.45	\$ 178.15		26.72	151.43	\$	178.15
Bridge Rails	20	Rails	\$14.95	\$ 299.00		44.85	254.15	\$	299.00
Drainfield (buried perf pipe and gravel)	2		\$1,500.00	\$ 3,000.00			3,000.00	\$	3,000.00
Drive Posts for water gaps	2	Posts	\$19.90	\$ 39.80		5.97	33.83	\$	39.80
South Project Area									
Perm. Electric Fence	3800	Feet	\$1.77	\$ 6,726.00	6,221.55	504.45		\$	6,726.00
Bridge Rails	20	Rails	\$14.95	\$ 299.00		44.85	254.15	\$	299.00
Set Posts for Bridge and water gaps	7	Posts	\$25.45	\$ 178.15		26.72	151.43	\$	178.15
Drive Posts for water gaps	2	Posts	\$19.90	\$ 39.80		5.97	33.83	\$	39.80
Water Gap	3	Panels	\$120.00	\$ 360.00			360.00	\$	360.00
			\$	-				\$	-
			\$	-				\$	-
			\$	-				\$	-
			\$	-				\$	-
			\$	-				\$	-
			Sub-Total	\$ 37,165.21	\$ 10,478.40	\$ 1,409.53	\$ 25,277.28	\$	37,165.21
Equipment									
			\$	-				\$	-
			\$	-				\$	-
			\$	-				\$	-
			\$	-				\$	-
			\$	-				\$	-
			\$	-				\$	-
			Sub-Total	\$ -	\$ -	\$ -	\$ -	\$	-
Mobilization									
			\$	-				\$	-
			\$	-				\$	-
			\$	-				\$	-
			\$	-				\$	-
			Sub-Total	\$ -	\$ -	\$ -	\$ -	\$	-
TOTALS				\$ 40,065.21	\$ 10,478.40	\$ 2,709.53	\$ 26,877.28	\$	40,065.21

*Units = feet, hours, inches, lump sum, etc.

MATCHING CONTRIBUTIONS

CONTRIBUTOR	IN-KIND SERVICE	IN-KIND CASH	TOTAL	Verified? (Y/N)
North West Energy Fisheries Technical Advisory Committee	\$ -	\$ 26,877.28	\$ 26,877.28	Pending Dec 5 mtg
Landowner In Kind	\$ 1,409.53	\$ -	\$ 1,409.53	y
NRCS/MCD	\$ 700.00	\$ -	\$ 700.00	y
Volunteer Labor	\$ 600.00	\$ -	\$ 600.00	y
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	

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<u>Personnel</u>						
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Oversight	80	hours	\$20.00	\$ 1,600.00		
Labor	40	hours	\$15.00	\$ 600.00		600.00
			Sub-Total	\$ 2,900.00	\$ -	\$ 1,300.00
<u>Travel</u>						
Mileage				\$ -		
Per diem				\$ -		
			Sub-Total	\$ -	\$ -	\$ -
<u>Construction Materials</u>						
<u>North Project Area</u>						
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<u>South Project Area</u>				\$ -		
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Water Gap	3	Panels	\$120.00	\$ 360.00		
				\$ -		
				\$ -		
				\$ -		
				\$ -		
			Sub-Total	\$ 37,165.21	\$ 10,478.40	\$ 1,409.53
<u>Equipment</u>						
				\$ -		



Figure 1: Project location area. South project area in yellow, north project area in red.



Figure 2: South section project area layout plan.



Figure 3: North section project area layout plan.



Figure 4: Current conditions on Moore's Creek within the South Section project area. Note lack of willows upstream from neighboring fenced property.

GOGGINS RANCH
22 GOGGINS DRIVE
ENNIS, MT 59729
406-682-4921

November 26, 2014

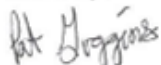
Michelle McGree
Future Fisheries Improvement Program Officer
Montana Fish, Wildlife & Parks
1420 East Sixth Avenue
P.O. Box 200701
Helena, MT 59620-0701

Dear Ms. McGree:

Please accept this letter of support for a Future Fisheries grant to assist in the riparian fencing of Moore's Creek on our ranch property. Although the stream is in fairly good condition, there are some problem areas that we would like to improve. With riparian fencing, we can better control our grazing of the area, and expect to promote willow growth, increase forage diversity, and improve the overall health of stream banks. We have seen a similar project that the Madison Conservation District was involved with in our area that is looking quite successful. We would like to have similar results on our ranch.

We would appreciate your support of this project.

Sincerely,



Pat Goggins
Goggins Ranch



MADISON CONSERVATION DISTRICT

Local Common Sense Conservation

222 E. Main Street Suite 2B | PO Box 606 | Ennis, MT 59729
406.682.7289

WWW.MADISONCD.ORG

Pat Goggins
22 Goggins Drive
Ennis MT 59729

Dear Pat,

The purpose of this letter is to provide details for the proposed Moore's Creek enhancement project on the Goggins Ranch. The Madison Conservation district is actively seeking funding to implement the necessary improvements to the area along Moore's Creek, including fencing, a stock water system, water gaps, and a hardened crossing. To ensure project effectiveness, the proposed work will also be evaluated to measure the response to the work.

Should required funding become available, the project will proceed according to the below schedule:

- Late winter 2015: Permitting
- Early Spring 2015: Contractor selection and contracting
- Spring/Summer 2015: Construction
- Fall 2015: Post construction monitoring
- Summer 2016: Annual monitoring, evaluation for future grazing

The landowner support and contribution that you have committed has been a valuable addition to the project already. To ensure long term project success, you will also need to continue to be involved with future management decisions to allow the project area to respond sufficiently before grazing is resumed. Starting in Spring 2016, MCD or NRCS staff will evaluate the project area to determine if the rest period has been sufficient to meet your goals and those of the supporting organizations. When conditions have sufficiently improved, short duration high intensity grazing can resume, during periods when flows quantities in Moore's Creek are low.

We anticipate the response to this work to be a worthwhile and beneficial effort, for all those involved. Should project funding be secured, your signature below will indicate agreement with the terms described in this letter. Please feel free to contact us with any questions or concerns. Thank you for working to conserve the natural resources of your property.

Sunni Heikes-Knapton
Madison Watershed Coordinator

By signing below, you agree to work with the MCD on future monitoring and management of the area.

Landowner

Date